

CLAIMS

1. A base station apparatus comprising:

control signal generation means for generating a
transmission power control signal for instructing
5 transmission power to a communication terminal apparatus
on a basis of a comparison result of a reception quality
of a signal transmitted by the communication terminal
apparatus with a desired reception quality; and

transmission control means for controlling
10 transmission processing to a transmission signal
including the transmission power control signal generated
by said control signal generation means on a basis of the
transmission power control signal transmitted by the
communication terminal apparatus,

15 wherein said control signal generation means and
said transmission control means respectively perform the
generation of the transmission power control signal and
the control of the transmission processing according to
a factor influencing a quality of communication with the
20 communication terminal apparatus.

2. The base station apparatus according to claim 1,
wherein the factor is an appearance of a new communication
terminal apparatus or an appearance of a new interference
source.

25 3. The base station apparatus according to claim 2,
wherein said control signal generation means comprises
change means for changing a desired reception quality

according to the appearance of a new communication terminal apparatus or the appearance of new interference source.

4. The base station apparatus according to claim 2,
5 wherein said transmission control means comprises
insertion means for inserting a signal instructing a
change of a desired reception quality in the communication
terminal apparatus into the transmission signal according
to the appearance of the new communication terminal
10 apparatus.

5. The base station apparatus according to claim 2,
wherein said control signal generation means generates
a transmission power control signal instructing an
increase of transmission power regardless of the
15 comparison result in case of an appearance of a new
communication terminal apparatus or in case of an
appearance of a new interference source.

6. The base station apparatus according to claim 2,
wherein said transmission control means increases
20 transmission power of the transmission signal regardless
of the transmission power control signal transmitted by
the communication terminal apparatus in case of an
appearance of a new communication terminal apparatus.

7. The base station apparatus according to claim 2,
25 wherein said transmission control means comprises
interference signal generation means for generating an
interference signal according to a new communication

terminal apparatus,

wherein said base station apparatus transmits a transmission signal including the generated interference signal.

5 8. The base station apparatus according to claim 2,
wherein said transmission control means comprises change
means for changing a data rate of a new communication
terminal apparatus and said base station apparatus
transmits a transmission signal including a transmission
10 signal of the new communication terminal apparatus after
the change of its data rate.

9. A communication terminal apparatus for
performing radio communication with a base station
apparatus, said base station apparatus comprising:

15 control signal generation means for generating a
transmission power control signal for instructing
transmission power to said communication terminal
apparatus on a basis of a comparison result of a reception
quality of a signal transmitted by said communication
20 terminal apparatus with a desired reception quality; and

transmission control means for controlling
transmission processing to a transmission signal
including the transmission power control signal generated
by said control signal generation means on a basis of the
25 transmission power control signal transmitted by the
communication terminal apparatus,

wherein said control signal generation means and

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said transmission control means respectively perform the generation of the transmission power control signal and the control of the transmission processing according to a factor influencing a quality of communication with said communication terminal apparatus.

10. A transmission power control method comprising:
a control signal generation step for generating a transmission power control signal for instructing transmission power to a communication terminal apparatus on a basis of a comparison result of a reception quality concerning a signal transmitted by the communication terminal apparatus with a desired reception quality; and
a transmission control step for controlling transmission processing to a transmission signal including the transmission power control signal generated at said control signal generation step on a basis of the transmission power control signal transmitted by the communication terminal apparatus,

wherein said control signal generation step and said transmission control step respectively perform the generation of the transmission power control signal and the control of the transmission processing according to a factor influencing communication with the communication terminal apparatus.